CLAIMS

What is claimed is:

1.   A method of diagnosing metastatic disease in a human comprising:

    a) removing a sample of cells from the human;

    b) assaying the sample for VEGF transcriptional activity; and

    c) determining the existence of metastatic disease characterized by the induction of VEGF transcriptional activity.

2.   The method of claim 1 wherein the cells are tumor cells.

3.   The method of claim 2 wherein the tumor cells are obtained through a surgical debulking of the tumor.

4.   The method of claim 1 wherein the transcriptional activity is measured by hybridization of RNA from the cells to a labeled complementary nucleic acid.

5.   The method of claim 1 wherein the transcriptional activity is measured by polymerase chain reaction.

6.   The method of claim 1 further comprising assaying the sample for the presence of VEGF protein.

7.   The method of claim 1 further comprising assaying the sample for the expression of tyrosine kinase receptors involved in angiogenesis.

8.   The method of claim 7 wherein the tyrosine kinase receptor is chosen from the group consisting of the *KDR/flk-1* receptor, the *flt-1* receptor, and/or the *tek/tie-2* receptor.

9. The method of claim 1 further comprising assaying the sample for the expression of hypoxia induced factor 1.

10. The method of claim 1 further comprising assaying for the abnormal expression of an oncogene.

11. A method of diagnosing metastatic disease in a human consisting of:
a) removing a sample of tissue or fluid from the human;
b) assaying for the presence of VEGF protein in the sample; and
c) determining the existence of metastatic disease by the presence of VEGF protein, wherein the abnormal presence of VEGF protein indicates the presence of metastatic disease.

12. The method of claim 11 wherein the sample is obtained through a surgical debulking of the tumor.

13. The method of claim 11 wherein the fluid is blood.

14. The method of claim 11 wherein the presence of VEGF is determined using an anti-VEGF antibody.

15. The method of claim 14 wherein the anti-VEGF antibody is used in an ELISA assay.

16. The method of claim 11 further comprising assaying the sample for the expression of tyrosine kinase receptors involved in angiogenesis.

17. The method of claim 16 wherein the tyrosine kinase receptors are chosen from the group consisting of the *KDR/flk-1* receptor, the *flt-1* receptor, and/or the *tek/tie-2* receptor.

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18.   The method of claim 11 further comprising assaying the sample for the expression of hypoxia induced factor.

19.   The method of claim 11 further comprising assaying for the expression of an oncogene.

20.   A method of diagnosing metastasis in a human comprising:
a) detectably labeling a ligand which specifically recognizes VEGF;
b) administering the labeled ligand to the human; and
c) detecting the localization of the labeled antibody or fusion protein in the human, wherein the abnormal localization of VEGF is indicative of a metastatic disease.